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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/207,361	12/08/98	ZUCKER	F RCA-89.291

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EXAMINER

CHU, K

ART UNIT	PAPER NUMBER
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2752

DATE MAILED:

07/26/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/207,361

Applicant(s)

ZUCKER, FRIEDHELM

Examiner

Kim-Kwok CHU

Art Unit

2752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-10 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claims ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☒ All b) ☐ Some * c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☒ received.
2. ☐ received in Application No. (Series Code / Serial Number) ____.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 and 5.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: .

Abstract

1. The abstract of the disclosure is objected to because of the following:

- (a) said abstract is not written in one paragraph; and
- (b) last line, the term "Figure 1" should be deleted.

Correction is required. See MPEP § 608.01(b).

Claim Objections

2. Claims 1, 5 and 10 are objected to because of the following informalities:

- (a) in claim 1, lines 2 and 7, both the terms "erasing facility" should be changed to --information erasing means--;
- (b) similarly, in claim 5, line 2, the term "erasing facility" should be changed to --information erasing means--;
- (c) in addition, in claim 10, line 2, the term "erasing facility" should be changed to --information erasing means--;
- (d) in claim 1, lines 2 and 3, the term "in the case of a recording device" should be changed to --in the case of recording information--; and
- (e) in claim 10, line 15, the term "for the purpose" should be changed to --said first and second optical scanning devices.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

(a) in claim 10, line 4, the term "an optical scanning device" is not clear because it is vague whether said scanning device is one of the claimed a first or a second optical scanning device. Applicant should delete said optical scanning device so that claim 10 has two properly named scanning devices;

(b) similarly, in claim 10, line 4, the term "a writing magnet" is not clear because it is used in another optical scanning device (lines 7 and 8). Applicant should clarify whether they are the same writing magnet; and

(c) in claim 10, line 5, the term "overwriting information" is not clear because the claimed first or second scanning device does not has this overwriting function. Applicant should clarify which scanning device can do the

information overwriting.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

*A person shall be entitled to a patent unless --
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States.*

6. Claims 1-4 and 6 are rejected under 35 U.S.C. § 102(b) as being anticipated by Shimamori et al. (U.S. Patent 5,535,180).

Shimamori teaches a magneto-optical recording system having all of the elements and means as recited in claims 1-4 and 6. For example, Shimamori teaches the following:

- (a) an information erasing means 2 (Fig. 1);
- (b) an information writing device 11 and 12 (Fig. 1);
- (c) a writing magnet 11 (Fig. 1);
- (d) an optical scanning device 12 (Fig. 1);
- (e) a magneto-optical recording medium 1 (Fig. 1);

(f) said erasing is formed by an erasing magnet 2 having a field strength 3 sufficient to initialize the magneto-optical recording medium (Fig. 1; column 3, lines 40-43);

(g) as in claim 2, said erasing magnet 2 has a mechanical connection to the writing device 11 and 12 (Fig. 1; inherent

feature because said means 2, 11 and 12 are all supported by a mechanical connection, for example, head assembly);

(h) as in claim 3, a mechanical connection such as a join to connect 2, 11 and 12 (Fig. 1; inherent feature because said means 2, 11 and 12 are mechanically joined together within a head assembly);

(i) as in claim 4, said erasing of information by said magnet 2 does not require the assistance of a laser (Fig. 1; column 3, lines 40-43); and

(j) as in claim 6, said erasing magnet 2 is a permanent magnet (Fig. 1; column 6, line 2).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimamori et al. (U.S. Patent 5,535,180) in view of Kamioka (U.S. Patent 5,493,548) .

Shimamori teaches a magneto-optical recording and

reproducing device very similar to that of the instant invention. However, Shimamori does not teach the following:

(a) as in claims 7-9, said magnet 2 is an electromagnet which can be deactivated;

(b) as in claim 10, a first optical scanning device for recording data;

(c) as in claim 10, a second optical scanning device for reproducing data; and

(d) as in claim 10, said two optical scanning devices are for simultaneously recording and reproducing data.

Kamioka teaches a magneto-optical recording and reproducing device having two optical scanning devices for simultaneously recording and reproducing data (Fig. 1; column 9, lines 3-20).

First, as in claims 7-9, although Shimamori does not teach that his erasing magnet 2 can be an electromagnet instead of a permanent magnet, this is not a novel feature because either a permanent magnet or an electromagnet generates an erasing magnetic field similar to Applicant's. Besides, in the field of magneto-optical recording, an erasing magnet is typically made of an electromagnet.

Furthermore, since Applicant does not specify whether his electromagnet is a switching type or not, when there is a motivation of using a non-switching magnetic field to erase an

recording medium such as Applicant's or Shimamori's, it would have been obvious to one of ordinary skill in the art to replace Shimamori's permanent magnet with a conventional electromagnet in order to generate an erasing magnetic field. The examiner takes Official Notice of this teaching as being known to these of ordinary skill in the art.

Second, as in claim 10, it is well known that a plurality of scanning devices (read/write head) can be used to simultaneously read and write information/data on an optical recording medium. For example, Kamioka uses one read/write head for reading information while another head for writing data on an optical recording medium.

When a single read/write head such as Shimamori's has a motivation of adding feature such as simultaneously read and write information/data to a magneto-optical device, it would have been obvious to one of ordinary skill in the art to use Kamioka's multiple optical scanning (read/write head) devices to achieve Shimamori's goal of simultaneously read and write information/data.

Even above modification of Shimamori's single optical scanning device to Kamioka's multiple optical scanning devices is electrically not compatible, the one of ordinary skill in the art would have been easily redesign a circuitry to adapt such one scanning device to a multiple scanning devices

modification.

Furthermore, even Shimamori's recording medium and Kamioka's recording medium are different in physical shape, one of the ordinary skill in the art would have been easily overcome this problem by changing the arrangement/position of optical scanning devices according to the physical shape of the recording medium.

Allowable Subject Matter

9. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is an Examiner's statement of reasons for the indication of allowable subject matter:

For a magneto-optical recording or reproducing system with an magnetic erasing device with a field strength sufficient to initialize the magneto-optical medium, applicant claims that an erasing magnet having a magnetic field which is directed opposite to a magnet of a writing device.

The prior art does not teach or fairly suggest the features as recited in applicant's claims.

11. Since allowable subject matter has been indicated, applicant is encouraged to submit formal drawings in response to this Office action. The early submission of formal drawings will permit the Office to review the drawings for acceptability and to resolve any informalities remaining therein before the application is passed to issue. This will avoid possible delays in the issue process.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gage (5,796,688) is pertinent because Gage teaches an optical drive apparatus having a multiple scanning head.

Yoshimoto et al. (5,172,364) is pertinent because Yoshimoto teaches a magneto-optic recording apparatus with controlled magnetic field generation.

Saito et al. (4,712,203) is pertinent because Saito teaches a thermomagnetic recording/erasing apparatus.

13. Any response to this action should be mailed to:
Commissioner of Patents and Trademarks Washington, D.C.
20231 or faxed to:

(703) 305-9051, (for formal communications intended for
entry) or:

(703) 305-9731, (for informal or draft communications,
please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park
II, 2021 Crystal Drive, Arlington. VA., Sixth Floor
(Receptionist).

Any inquiry of a general nature or relating to the status
of this application should be directed to the Group
receptionist whose telephone number is (703) 305-3900.

Any inquiry concerning this communication or earlier
communications from the examiner should be directed to Kim CHU
whose telephone number is (703) 305-3032.

kc 7/21/2000

Kim-kwok CHU
Examiner AU2752
July 21, 2000

(703) 305-3032

[Signature]
TAN DINH
PRIMARY EXAMINER